UTILITY PUBLIC BENEFIT FUNDS
RENEWED INTEREST AT THE STATE AND FEDERAL LEVELS

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ABSTRACT

Twenty-four states and the District of Columbia have dedicated funding for energy efficiency programs and services. This paper examines the factors behind renewed interest in systems benefit charges and public benefit funds to support energy efficiency and renewable energy programs. It examines the level of state/utility funding and provides a state-by-state comparison. The "standard offer" utility-run energy efficiency programs in Texas are examined and a comparison with other states is provided.

BACKGROUND

Nationally, states have increased demand side management and public benefit funds from a low point of $900 million in 1998 to $1.35 billion according to a 2003 study by the American Council for an Energy Efficient Economy (ACEEE). The trend to increase funding continues today according to ACEEE [Kushler and York, 2004]. Two states, California and New York, have instituted dramatic new increases. The recent increases in funding in a few states appear driven by the high demand for clean electricity, as well as the success at mitigating load growth, especially in California.

UTILITY PUBLIC BENEFIT FUNDING

Ratepayer-funded electric energy efficiency programs vary widely from state-to-state with almost half the states spending very little or nothing.

FACTORS IMPACTING INCREASED DEMAND

During the mid-to late '90's when electric utility deregulation was spreading rapidly led by California, utility demand side management programs were put on hold and funding levels dropped precipitously. The slow increase in funding in the last five years seems to be a result of several factors:

- Public and private demand to deal with Climate Change,
- US Environmental Protection Agency mandated State Clean Air Plans, and
- Public acceptance of energy efficiency and renewable energy measures.

STATE FUNDING METRICS

This paper looks at three parameters to provide a state-by-state comparison. These metrics include:

- Funding levels for state energy efficiency programs,
- Funds per capita for energy efficiency programs, and
- Funds for energy efficiency programs as a percentage of electric utility revenues.

State Funding Levels

California.
In September 2005, the California Public Utilities Commission announced the nation's most aggressive utility funding level of $2 billion for the period 2006 – 2008 for gas and electric energy efficiency programs through a systems benefit charge.[1]

New York.
In 2001, New York doubled their system benefit funds from $78.1 million to $150 million/year through 2006 to be administered by the New York State Energy Research and Development Authority. See an overview of their programs on the web at: http://www.cleanenergystates.org/library/ny/PSC_App_SBC_doc9130.pdf.pdf.

In 2005, the New York Public Service Commission recently took public comments on the funding levels and extension of their public benefits energy efficiency programs beyond 2006. An in-depth analysis of the comments and program effectiveness can be found on the web at: http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/ArticlesByCategory/721B232D106700BE85257069006D3DF4/$File/05m0090.08.30.05.pdf?OpenElement.

Texas.
According to a report by Frontier and Associates, Texas investor-owned utilities spent $87.5 million in 2004. This can be compared with funding levels of $150 – $200 million prior to retail competition. [Frontier and Associates, 2005].

Table 1. 2003 Electric Energy Efficiency Spending Per Capita: Top Ten States

Rank	State	Spend/Capita	2000 Rank
1	Vermont	$28.26	5
2	Massachusetts	$21.49	2
3	New Hampshire	$16.45	16
4	Washington	$15.21	11
5	Rhode Island	$14.13	3
6	Oregon	$13.44	14
7	Wisconsin	$11.33	7
8	New Jersey	$11.31	4
9	Montana	$10.65	15
10	Iowa	$10.17	13
	U.S. Average	**$4.65**	

Source: ACEEE 2004, "Five Years In: An Examination of the First Half-Decade of Public Benefits Energy Efficiency Policies.

Funds per Capita

The national average of utility expenditures per capita is $4.65 with Vermont being the highest at $28.26 in 2003 according to Kushler, York and Witte (2004). See Table 1. With a dramatic new funding increase in 2006, California will be spending almost $27 per capita, placing them second in the nation behind Vermont. (Note: the 2005 Vermont expenditure level has not been updated.)

Texas Ratepayer Funding Per Capita

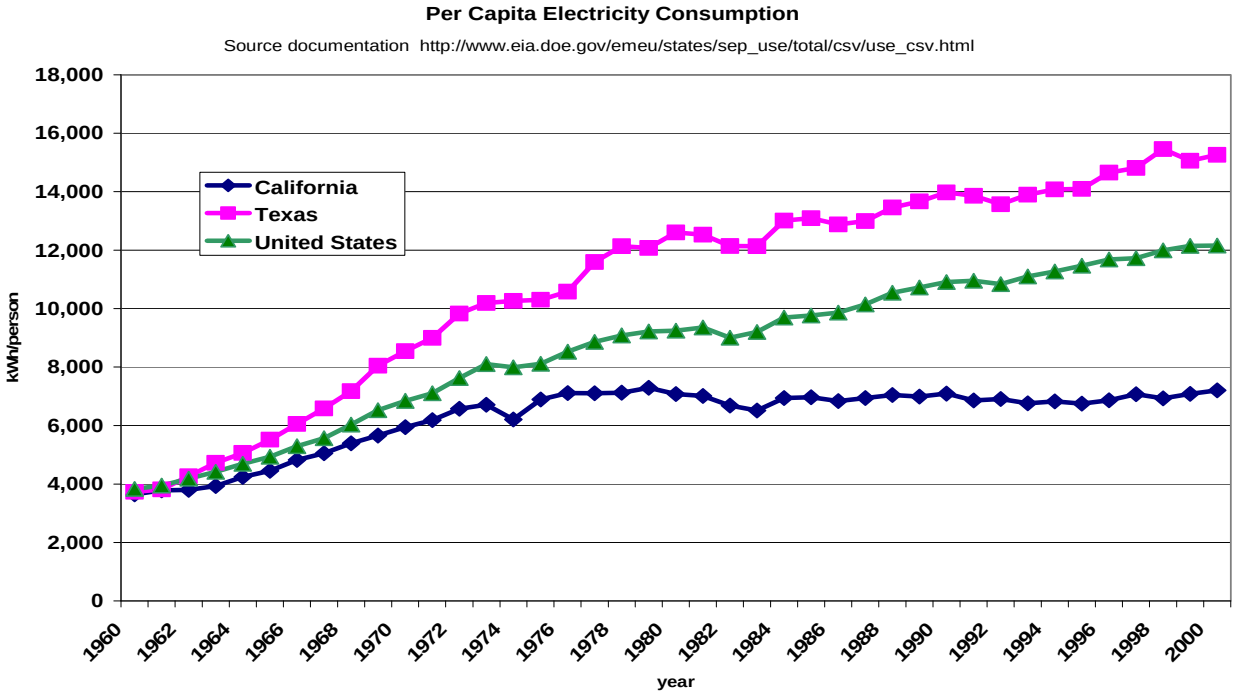
Using a 2005 Census projection of 23.2 million people [Texas Data Center, 2005], Texas is spending approximately $3.45 per capita or less than 15 % of the new California per capita expenditure.

Per Capita Electricity Consumption

It should also be noted here that California has managed through aggressive laws and funding to keep their electricity load growth essentially flat on per capita basis since

1974 with the Texas per capita load growth estimated to be twice that of California and 17 % greater than the national average, using EIA data. See Table 2 below for a comparative graph by the California Energy Commission. [Note: Several states, including Texas, have funding for low-income and renewable programs that are not included in this paper.]

Table 2: Per Capita Electricity Consumption



Source: Dr. Art Rosenfeld, Commissioner, California Energy Commission, August 2004.

Funding as Percentage of Revenues

Another comparative measure is energy efficiency spending as a percentage of utility revenues. Vermont ranked number one nationally in the 2004 Kushler, York and Witte report with energy efficiency spending 3 % of utility revenues. See Table 3 below.

In 2006, CA will be spending 3 % of utility revenues on energy efficiency programs, well above most state spending levels.

Texas Funding as Percent of Revenues

Texas expenditures as a percentage of revenues are approximately 1/3 of one percent [$87.5 million / $23,396 million or 0.374 %]. This is 1/10th of what California spends. [Frontier and Associate, 2005].

Funding Level Recommendation

A 2005 Western Governor's Association (WGA) report by their Energy Efficiency Task Force recommended that states spend 2 % of revenues on energy efficiency programs, noting that "best practice" in California was now 3 % of revenues. [Western Governors Association, 2005]

Table 3: 2003 Electric Energy Efficiency Spending as a Percentage of Utility Revenues

Rank	State	Spending as a % of Annual Total Revenues	2000 Rank
1	Vermont	3.0%	7
2	Massachusetts	2.4%	2
3	Washington	2.0%	10
4	Rhode Island	1.9%	3
5	New Hampshire	1.8%	18
6	Oregon	1.7%	14
7	Wisconsin	1.4%	5
8	New Jersey	1.4%	4
9	Montana	1.3%	15
10	California	1.2%	6
	U.S. Average	**0.5%**	

Source: ACEEE 2004, "Five Years In: An Examination of the First Half-Decade of Public Benefits Energy Efficiency Policies.

TEXAS FUNDING FOR UTILITY ENERGY EFFICIENCY PROGRAMS

Legislative Background

Senate Bill 7 in 1999 amended the Public Utility Regulatory Act by creating an energy efficiency goal for Texas electric utilities. This statute totally changed the way Texas utilities offer energy efficiency programs in a new, competitive market. State regulation [PURA 39.905] requires each investor-owned (IOU) electric utility to offer cost-effective, market-based energy efficiency and market transformation programs to meet at least 10 % of the its annual electric load growth.

In 2005, the 79th Texas Legislature increased the emphasis on energy efficiency to meet electric load growth, mitigate air pollution in non-attainment counties, fund research and technology deployment, and expanded the number of Standard Offer Programs with the passage of two significant pieces of legislation. First, House Bill 2129 requires the consideration of 12 new "Customer Option Programs" by all Texas utilities that reduce air-contaminants [PURA Sec. 31.005]. These new programs range from an air-conditioning tune-up program to installation of cool roofing materials as well as a new solar hot water heating market transformation program. Second, Senate Bill 712 established four new standard offer programs and allows utilities to use 10 % of monies approved for energy efficiency programs for research and development and implementation of new technologies.

SUMMARY

Nationally, states have increased demand side management and public benefit funds from a low point of $900 million in 1998 to $1.35 billion according the American Council for an Energy Efficient Economy (2003). Two states, California and New York, have instituted dramatic new increases which appear to be driven by the high demand for clean electricity as well as the success at mitigating load growth, especially in California. Per capita demand for electricity use in California has remained constant since 1974 while in Texas the per capital consumption has increased by 50 %. Texas utilities will spend only 1/10th of California utilities in 2006.

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